

Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A driving circuit for a display device comprising:
 a DC-DC converter provided inside one chip, for controlling converting an external voltage input depending on a timing control signal and providing a controlled DC voltage;
 an interface unit provided inside the chip, for interface with parts outside the chip;
 a memory provided inside the chip, for storing display information transmitted through the interface unit;
 a data processor provided inside the chip, for providing a display data to a display panel of the display device using the display information stored in the memory and the controlled DC voltage output from the DC-DC converter;
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a scan processor provided inside the chip, for outputting scan data to the display panel using the display information and the controlled DC voltage output from the DC-DC converter; and

a timing control unit provided inside the chip, for providing the timing control signal to the DC-DC converter, the interface unit, the memory, the data processor, and the scan processor.

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2. (Previously Presented) The driving circuit for a display device as claimed in claim 1, further comprising a power peripheral unit provided outside the chip, for controlling input and output voltages of the DC-DC converter, preventing a backward current from occurring during the DC-DC conversion, and maintaining the input DC voltage for a predetermined time.

3. (Currently Amended) The driving circuit for a display device as claimed in claim 2, wherein the power peripheral unit includes an inductor, a diode, and a resistor, which are hard to be installed inside the chip.

4. (Currently Amended) The driving circuit for a display device as claimed in claim 3, wherein the power peripheral unit includes:

an input terminal providing an applying external voltage to the DC-DC converter;

an output terminal output terminal outputting the controlled DC voltage output from the DC-DC converter to the outside the chip;

a first capacitor connected with the input terminal in parallel to minimize reduce fluctuation of the input voltage;

a second capacitor connected with the output terminal in parallel to minimize reduce fluctuation of the controlled DC voltage;

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an inductor connected in series between the input terminal and the output terminal, for maintaining the external voltage applied to the DC-DC converter for a predetermined time; and

a diode connected in series between the input terminal and the output terminal, for preventing reducing a backward current from occurring.

5. (Previously Presented) The driving circuit for a display device as claimed in claim 1, wherein the DC-DC converter includes:

a mode control unit outputting a voltage control signal in response to the timing control signal from the timing control unit;

an impedance generating unit outputting an impedance value changed depending on the voltage control signal output from the mode control unit;

a resistor connected with an output terminal of the DC-DC converter in parallel and with an output terminal of the impedance generating unit in series; and

a voltage control unit receiving a feedback value of the controlled DC voltage distributed by the impedance value output from the impedance generating unit and a value of the resistor, and then outputting a DC voltage controlled according to the feedback voltage.

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6. (Previously Presented) The driving circuit for a display device as claimed in claim 5, wherein the impedance generating unit and the resistor can be installed not inside the chip but outside the chip.

7-20. Canceled

21. (New) The driving circuit for a display device as claimed in claim 1, wherein the DC-DC converter controls the external voltage by constructing a feedback circuit that depends on the timing control signal.

22. (New) The driving circuit for a display device as claimed in claim 1, wherein the DC-DC converter comprises a control unit that controls an output voltage of the DC-DC converter provided inside the one chip by using a feedback circuit responsive to the timing control signal.

23. (New) The driving circuit for a display device as claimed in claim 1, wherein the controlled DC voltage is changed by the DC-DC converter inside the chip by controlling a load condition of a feedback signal from the controlled DC voltage to the DC-DC converter.

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24. (New) The driving circuit for a display device as claimed in claim 23, wherein the DC-DC converter comprises:

a voltage control unit having an input terminal that receives the external voltage, an output terminal and a feedback terminal; and

a feedback circuit coupled between the output terminal and the feedback terminal that controls the feedback signal according to the timing control signal.

25. (New) The driving circuit for a display device as claimed in claim 1, wherein the DC-DC converter comprises a voltage control unit that receives a

feedback value of the controlled DC voltage distributed by an impedance value and outputs a DC voltage controlled according to the feedback value.

26. (New) The driving circuit for a display device as claimed in claim 1,
wherein the DC-DC converter comprises:

a voltage control unit having an input terminal that receives the external voltage, an output terminal and a feedback terminal; and

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C) a mode control unit that receives the timing control signal, wherein the controlled DC voltage can be generated by the DC-DC converter for a plurality of modes according to a feedback signal received at the feedback terminal that corresponds to a voltage control signal output by the mode control signal.

27. (New) The driving circuit for a display device as claimed in claim 1,
wherein the controlled DC voltage level is changed by the DC-DC converter provided inside the chip.

28. (New) The driving circuit for a display device as claimed in claim 2,
wherein the output voltage of the DC-DC converter is changed by controlling a voltage control signal and a signal of the DC-DC converter.

29. (New) A driving circuit for a display device comprising:

DC-DC converter means provided inside one chip, for controlling an external voltage input depending on a timing control signal and providing a controlled DC voltage;

memory means provided inside the chip, for storing display information;

data processing means provided inside the chip, for providing a display data to a display panel of the display device using the display information stored in the memory means and the controlled DC voltage output from the DC-DC converter means;

scan processing means provided inside the chip, for outputting scan data to the display panel using the display information and the controlled DC voltage output from the DC-DC converter means; and

timing means provided inside the chip, for providing the timing control signal to the DC-DC converter means, the memory means, the data processing means, and the scan processing means, wherein the DC-DC converter means comprises,

mode control means for outputting a voltage control signal in response to the timing control signal from the timing means,

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resistance means coupled to an output terminal of the DC-DC converter for distributing the controlled DC voltage, and

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voltage control means for receiving a feedback voltage of the controlled DC voltage distributed by the resistance means responsive to the voltage control signal of the mode control means, and then outputting the DC voltage controlled according to the feedback voltage.
